

Ongoing ban works: Compost sampling drives point home

The Washington State Department of Agriculture (WSDA) has completed its third year of compost sampling at manufacturing facilities in Washington. The results from November 2003 show a 9 percent reduction of clopyralid herbicide residues as compared to the previous year. And in comparison to 2002 sampling, the results represent more than an 80 percent reduction in residues.

In 2003, the department sampled 12 facilities, again – seven in Western Washington and five in Eastern Washington. The average clopyralid residue level of all the facilities is 12.9 parts per billion (ppb). In Western Washington, the average among seven facilities was only 1.1 ppb. In fact, four of the compost centers having no detections at all. In Eastern Washington the average among five facilities was 29.4 ppb. Researchers sampled both finished composts and individual feedstocks. The highest level of clopyralid detected was 260 ppb in Timothy hay that became compost feedstock for an Eastern Washington facility. Growers need to remember that grass hay or straw treated with a clopyralid-containing product *cannot* end up at a compost facility as feedstock.

For the third consecutive year, reduction of clopyralid in compost clearly indicates that the ban for its use on turf is effective. All of the ready-to-sell composts that WSDA sampled came in well below levels that would harm vegetables or ornamental plants if applied at appropriate rates and mixed with the soil. Among the 15 samples collected in Western Washington, and that includes feedstocks, twelve had no level of detection.

Bioassays conducted by the Washington State University Research Station (Puyallup), confirms that the ban is having the desired effect. The 2003 samples of finished compost sent to Puyallup showed a marked improvement over 2002 samples. None of the Western Washington samples showed growth regulator-type symptoms when susceptible peas were planted in the compost. The five finished composts from Eastern Washington graded out as follows: 1: None; 3: Slight; and 1: Moderate symptoms. By comparison, in 2002 three of the Eastside samples rated as showing severe symptoms.

WSDA Compost Sampling

Clopyralid Analysis Results, Anatek lab. (MDL 1 ppb)

November 2003

# Facility	# Samples	# positive	results ppb	average ppb
1 east	2	2	7,3	5
2 east	4	4	3,260,5,32	75
3 east	4	3	9,7,7	8
4 east	3	3	6,7,2	5
5 east	3	3	9,87,66	54
6 west	2	0	0,	0
7 west	3	1	4,	4
8 west	2	0	0,	0
9 west	2	0	0,	0
10 west	2	1	3,	3
11 west	2	1	1,	1
12 west	2	0	0	0
Totals	31	18 (59%)		➔ 12.9

ppb = parts per billion MDL = minimum detection limit

For more information regarding this sampling program and history of herbicide-contaminated compost, contact Scott Nielsen at (509) 533-2687 or snielsen@agr.wa.gov.